

expected that hereafter there will be nothing to offend the eye of the most fastidious.

PROF. J. E. TODD, of Beloit, Wis., observes that in *Psoralea argophylla* a joint is formed in the stem very near the top of the ground, as perfect as that separating a leaf from the stem. "It cuts through all the tissues so that when the top dries up and begins to sway in the wind, it is broken off very readily or evenly." Thus they are rolled across the prairie and their seeds are disseminated.

MR. THOS. H. CORY has been studying the development and mode of fertilization of the flowers of *Aselepias Cornuti* and has made some important additions to the work done by R. Brown, Payer, Schacht, and others. He shows that the so-called "stigma-disk" is formed by the fusion of the two style-apices, and not by that of the two stigmas. The anther wings, he finds, originate as lateral processes of the connective. In the matter of pollen formation the genus presents a "perfectly unique, isolated, and peculiar case of formation." These and many other results were announced recently to the Linnean Society of London.

MR. J. G. BAKER has presented to the Linnean Society of London the second part of his "Contributions to the Flora of Madagascar," in which are descriptions of 160 new *Gamopetalae*. A new genus is described allied to *Cinchona*. Several new genera of *Acanthaceae* are described, among which is *Monachochlamys*, so named because each one of the numerous flowers is contained in a persistent spathaceous bract, like the hood of a Franciscan monk.

THE SHORT PAPER by Dr. A. L. Childs in the *Popular Science Monthly* for December, 1882, (vide BOT. GAZ., this volume, page 163), has called out a vigorous rejoinder from Mr. J. B. Strawn, C. E. Mr. Strawn, referring to the well-known fact that surveyors were in the habit of "blazing" trees on lines and at corners, says that, having had occasion many times to chop into such trees to satisfy himself of their identity, he has in every instance found the number of rings to correspond with the number of years which had elapsed since the blazing was done. The rings found by Dr. Childs he suspects to be those formed by trees when, from drought or some similar cause, the wood ceases to grow, but afterward, on account of copious rains and a high temperature, is forced into a second growth. Mr. Strawn also affirms that examination of trees of his own planting confirms him in the belief that the truthfulness of the "ring-record" may be depended upon.

CURRENT LITERATURE.

The Mycologic Flora of the Miami Valley, Ohio. By A. P. Morgan. From Jour. Cin. Soc. Nat. Hist. vol. vi., April, 1883.

Mr. Morgan has long been studying Fungi, and the above is a part of the result of his study in the Miami Valley. It is a most commendable effort to put the descriptions of these low forms of plant life within the reach of the many,

for it would be hard to accumulate too much knowledge of the so-called Fungi. The pamphlet before us is devoted to the *Leucospori* under the immense genus *Agaricus*, and the species number just 80. Four good plates illustrate six new species, all of Mr. Morgan's describing except the *A. Morgani* of Mr. Peck. The species are arranged according to the *Hymenomyces Europæi* of Elias Fries, whose classical descriptions are also carefully translated, the local variations and general observations being appended in the form of remarks, which are very interesting. Lea's catalogue is the only other one covering this region, and his 34 *Leucospori* have been increased to 80 by Mr. Morgan, 5 of which he has described as new species, and 12 bear Mr. Peck's name as author. The second paper will be devoted to the remaining *Agarici*.

Tables for the use of Students and Beginners in Vegetable Histology. By D. P. Peck and B. S. Bostwick. Boston. S. E. Cassino. 1882.

This little book of some 40 pages is printed and bound in a most elaborate way, the large type, broad pages, and stiff back, fitting it more for the library than the laboratory. It is hardly fairly named, as it deals only with the micro-chemistry of plants, and by no means presents the broad principles of vegetable histology. It could be made useful under an efficient teacher, but then it would hardly be needed; but for an unskilled teacher, or one who is attempting self-instruction, it seems hardly the thing. There is given a list of reagents, but with nothing practical as to their preparation or application. Then follows an account of the common "vegetable products," under which, among others, we find grouped protoplasm, the nucleus, and silica. A better heading would have been "cell-contents," which is used for Table I. The second table is devoted to "Cellulose Forms," by which is meant the form and structure of cells; and Table III. is headed "Plant Products," which by no means includes all the "vegetable products" mentioned in the text under that caption. In fact, to the casual reader, it would seem rather difficult to draw the line between "cell-contents" and "plant products," although a table is devoted to each. The conception of the work is excellent, but the execution seems very imperfect.

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